Diabetes Inpatient Management

Alberta Health Services
Diabetes, Obesity, and Nutrition
Strategic Clinical Network (DON SCN)
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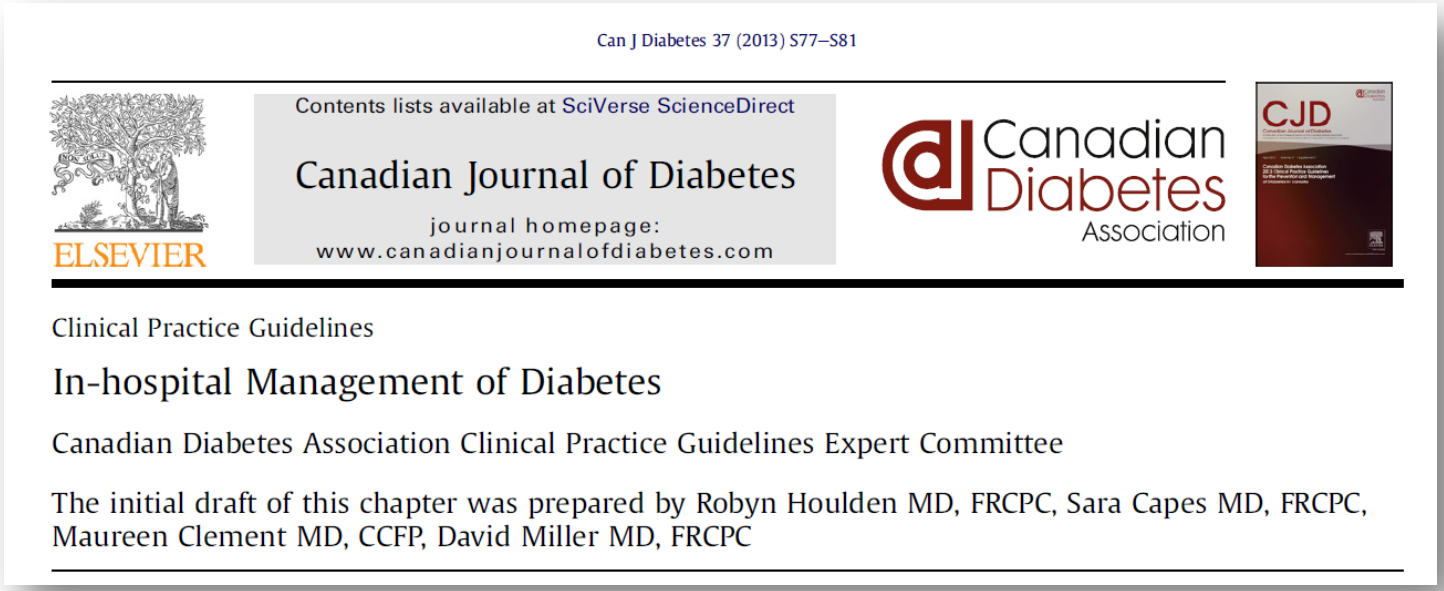
Key Message #1

1 in 5, of all adult patients in Alberta hospitals, has diabetes.

Many of these patients, including those not on insulin at home, would benefit from insulin therapy in hospital.

Key Message #2

In hospital glycemic targets are **5-10 mmol/L**



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Clinical Practice Guidelines

In-hospital Management of Diabetes

Canadian Diabetes Association Clinical Practice Guidelines Expert Committee

The initial draft of this chapter was prepared by Robyn Houlden MD, FRCPC, Sara Capes MD, FRCPC, Maureen Clement MD, CCFP, David Miller MD, FRCPC

Key Message #3

Hyperglycemia (blood glucose above 10 mmol/L) is common in hospital.

Key Message #4

Hyperglycemia contributes to:

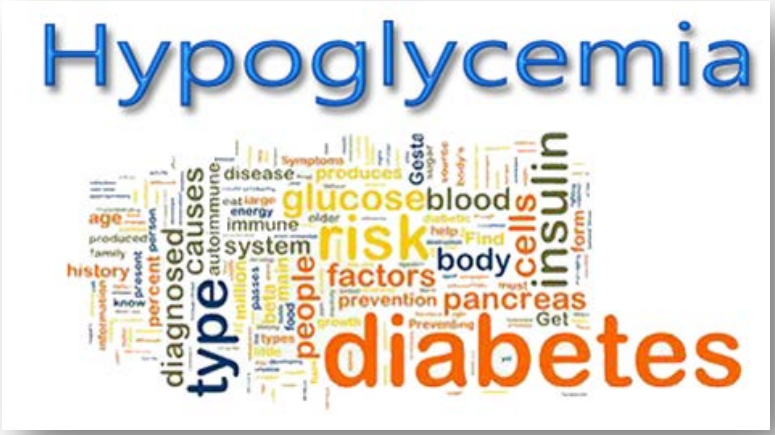
a) Delayed wound healing
b) Surgical site infections
c) Hospital acquired infections (such as pneumonia)
d) Increased length of stay
e) Mortality

Key Message #5

Hypoglycemia is often over treated.

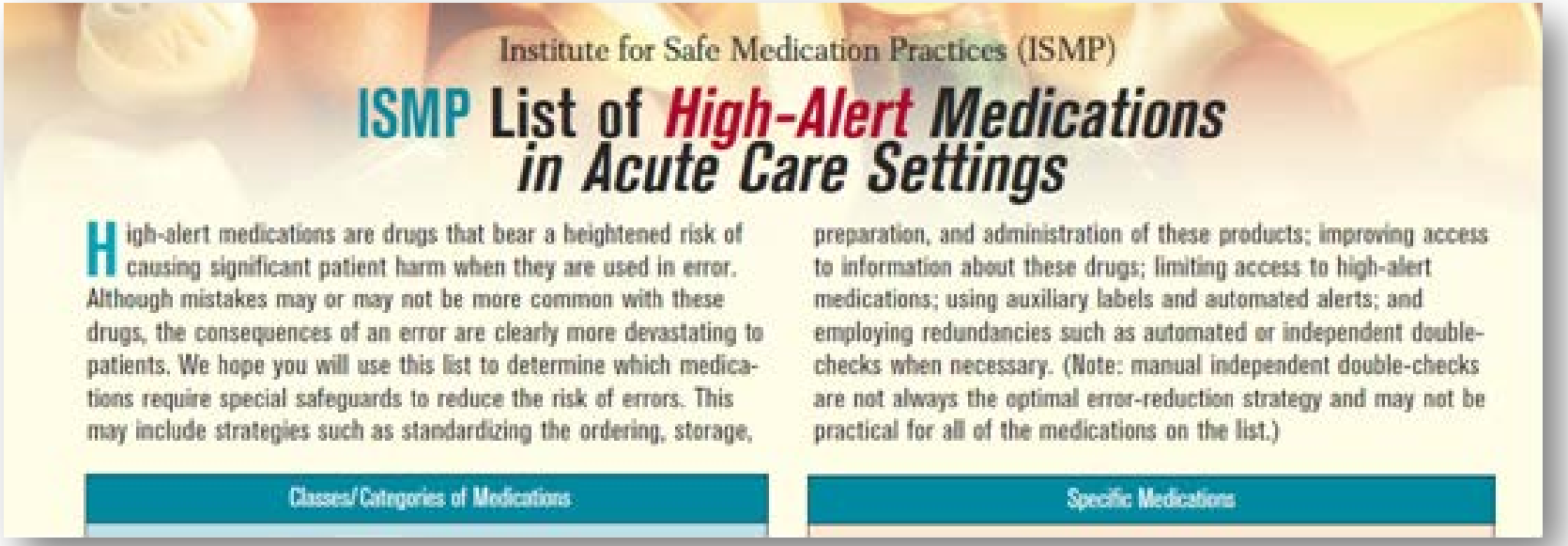
a) 15g of fast acting carbohydrate is usually adequate for treating most lows

b) Insulin doses should be reduced, rather than held, in most instances.



Key Message #6

Insulin is a high alert medication frequently prescribed in acute care.



Institute for Safe Medication Practices (ISMP)

ISMP List of *High-Alert* Medications in Acute Care Settings

High-alert medications are drugs that bear a heightened risk of causing significant patient harm when they are used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients. We hope you will use this list to determine which medications require special safeguards to reduce the risk of errors. This may include strategies such as standardizing the ordering, storage, preparation, and administration of these products; improving access to information about these drugs; limiting access to high-alert medications; using auxiliary labels and automated alerts; and employing redundancies such as automated or independent double-checks when necessary. (Note: manual independent double-checks are not always the optimal error-reduction strategy and may not be practical for all of the medications on the list.)

Classes/Categories of Medications	Specific Medications

Key Message #7

- There is potential **harm** for the patient with sliding scale insulin. Sliding scale insulin (on its own) is a reactive approach, treating hyperglycemia after is has occurred.

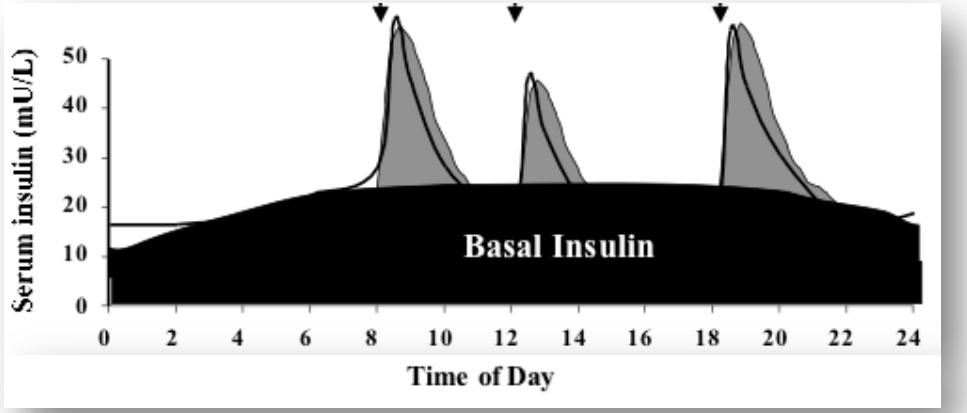
Key Message #8

There is improved patient **safety** with basal bolus insulin therapy (basal + bolus+ correction insulin).

- Basal bolus insulin therapy (BBIT) decreases the number of hypoglycemic and hyperglycemic episodes for the patient.
- For information on BBIT visit www.bbit.ca

Key Message #9

- **Patients with type 1 diabetes always need basal insulin**.



In other patients with diabetes, basal insulin should rarely be held.

Key Message #10

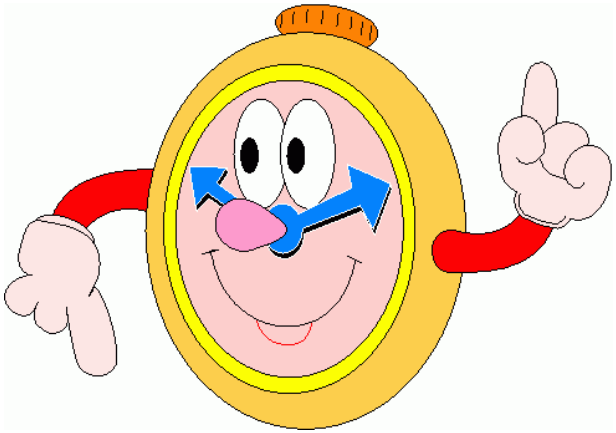
There are very few instances where all insulin doses should be held.

Holding of insulin requires an order from the physician (or other prescriber).

The **bolus** dose of insulin should be held if patient is not eating.

Key Message #11

Timing of insulin administration needs to be coordinated with blood sugar measurement and meals.



Key Message #12

Inpatient glycemic management requires an interdisciplinary team approach, which includes the patient and/or family members, with frequent communication between *all* team members.

Key Message #13

Patients should be allowed and supported to self-manage their diabetes where appropriate.

Key Message #14

Important aspects of supporting the patient's **transition** from, and back to, home are:

a) Ensure medication history done at admission, to confirm diabetes medications and dosage at home.

b) Include the patient in the ongoing diabetes management care plan.

transition from, and back to, home (cont)

c) The patient or caregiver needs to be aware of the discharge plan (written instructions); especially which diabetes medications are to be resumed, dose changes, and/or new medications added

d) Provide communication to the community physician regarding course of care in hospital and discharge plan

Summary

- Key Messages #1-14
- Goal: to provide safe and effective care for our diabetes patients in hospital
  - Providing evidence based care
  - Reduce risk of complications and LOS
  - Improve patient (family) satisfaction
  - Smooth transition home

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